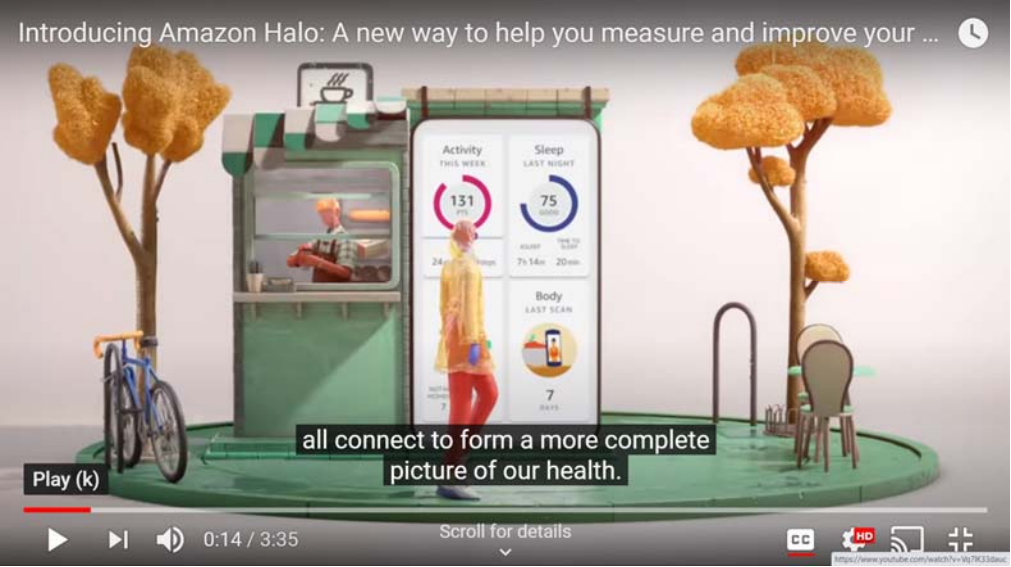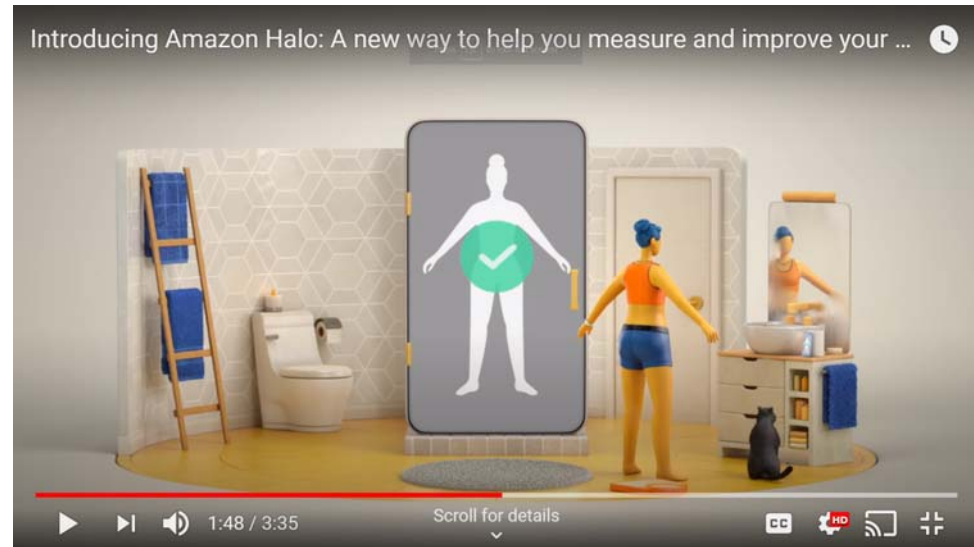## U.S. PATENT NO. 8,374,671 v. AMAZON HALO

U.S. Patent No. 8,374,674 – Claim 1	Amazon Halo
(a) A <mark>health</mark> indicator device comprising:	The Amazon Halo is a health indicator device as shown by the screen shot below: [https://www.youtube.com/watch?v=MjQZ5TyGJng; downloaded 09/04/2020]

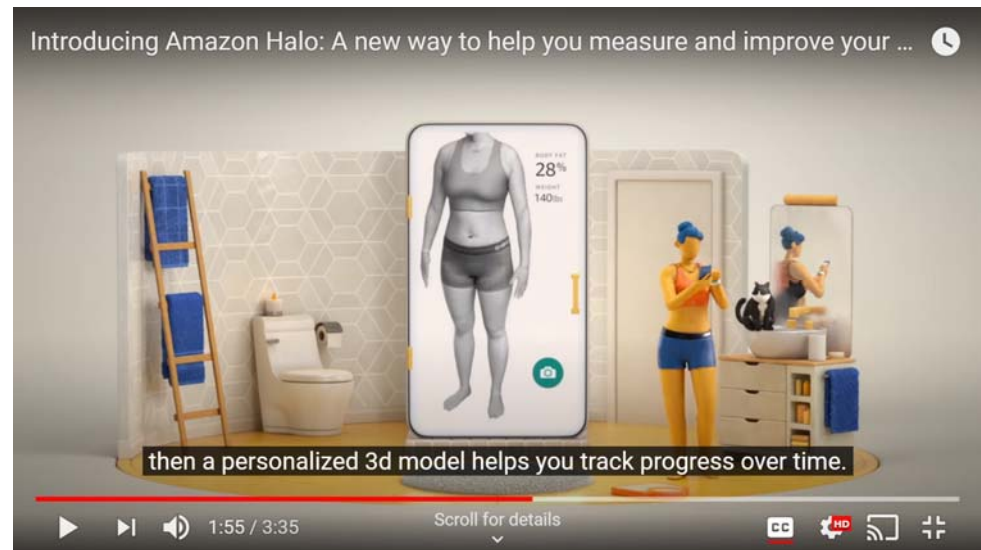|	
(b) body scanner;	The Amazon Halo includes a body scanner as shown by the screen shot below: [https://www.youtube.com/watch?v=MjQZ5TyGJng; downloaded 09/04/2020]
(c) body volume calculator:	The Amazon Halo includes a body volume calculator as indicated in the following Amazon blog: "The nerdy stuff Body is powered by artificial intelligence (AI) developed by our CV and ML team and includes a suite of algorithms that can generate your personalized 3D body model, BFP ["Body Fat Percentage"], and body model slider, a visual of how your body could change as you gain or lose body fat. Here's how it works: First, a deep neural network (DNN) identifies your body and separates it from the background with pixel-level accuracy. This network is trained on hundreds of thousands of images to recognize the body in the photo, regardless of what else is in the camera's view (pets, furniture, shadows, etc.). Next, the information is analyzed by another DNN to understand the relationship between images of a person and the physical properties of their body, including body shape and distribution of fat and muscle. This DNN does not directly see body fat but analyzes the details of regions of the body known to be "hot spots" for measuring body fat, like the torso, thighs, and mid-back, as well as the overall shape of your body from the scan images to accurately estimate your BFP. [https://blog.aboutamazon.com/devices/a-better-measure-of-health; download 09/04/2020].

(d) body database; and	The AI in claim 1(c) above necessarily includes a database.
	"Next, the information is ==analyzed by another DNN== to understand the relationship between ==images of a person and the physical properties of their body, including body shape and distribution of fat and muscle==. This DNN does not directly see body fat but analyzes the details of regions of the body known to be "hot spots" for measuring body fat, like the torso, thighs, and mid-back, as well as the overall shape of your body from the scan images to accurately estimate your BFP.
	[https://blog.aboutamazon.com/devices/a-better-measure-of-health; download 09/04/2020].
(e) health calculating device	Amazon Halo is a health calculating device as indicated in the following Amazon blog:
	"==The BFP measurement in Amazon Halo is as accurate as methods a doctor would use== and nearly twice as accurate as leading at-home smart scales. So, if you're used to getting your BFP from a smart scale, you should expect to see a difference. We tested accuracy using Dual-energy X-ray Absorptiometry (DXA) which is considered the clinical gold standard for body composition and widely used; but these machines would require a doctor's prescription and could come with an average $80 price tag per scan. We also ==tested across a wide array of body types, ages, genders, ethnicities, and other demographics==. And we're not done yet—Body will continue to get better and even more accurate over time."
	[https://blog.aboutamazon.com/devices/a-==better-measure-of-health==; download 09/04/2020].

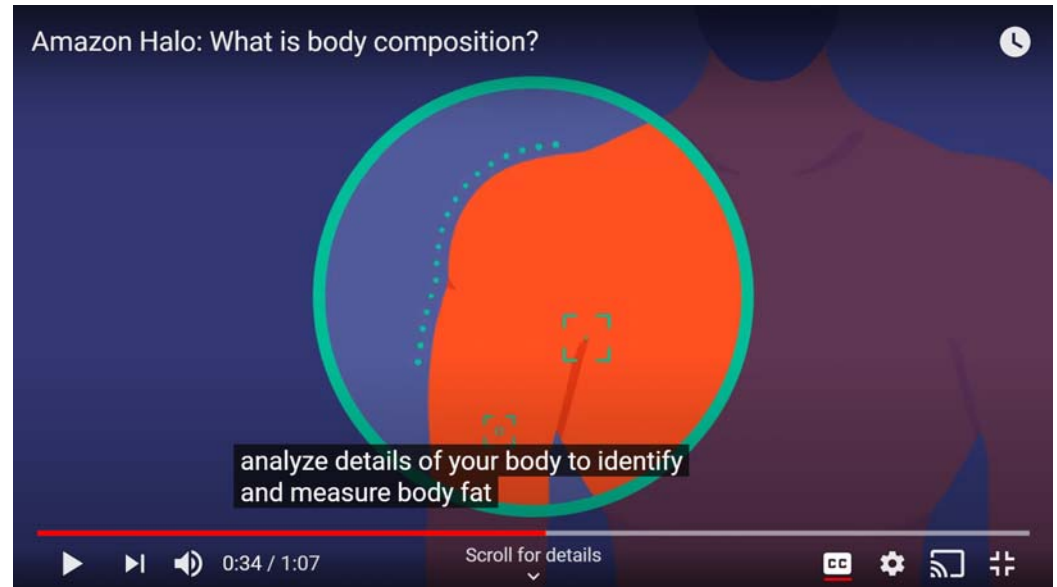|	
wherein said body scanner is configured to obtain a *three-dimensional model* of a person;	The Amazon Halo is configured to obtain a *three-dimensional* model of a person as shown in the screen shot below: [https://www.youtube.com/watch?v=MjQZ5TyGJng; downloaded 09/04/2020]

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said body volume calculator is configured to calculate from said three-dimensional model first volume comprising a first body part of said person and a second volume comprising a second body part of said person;
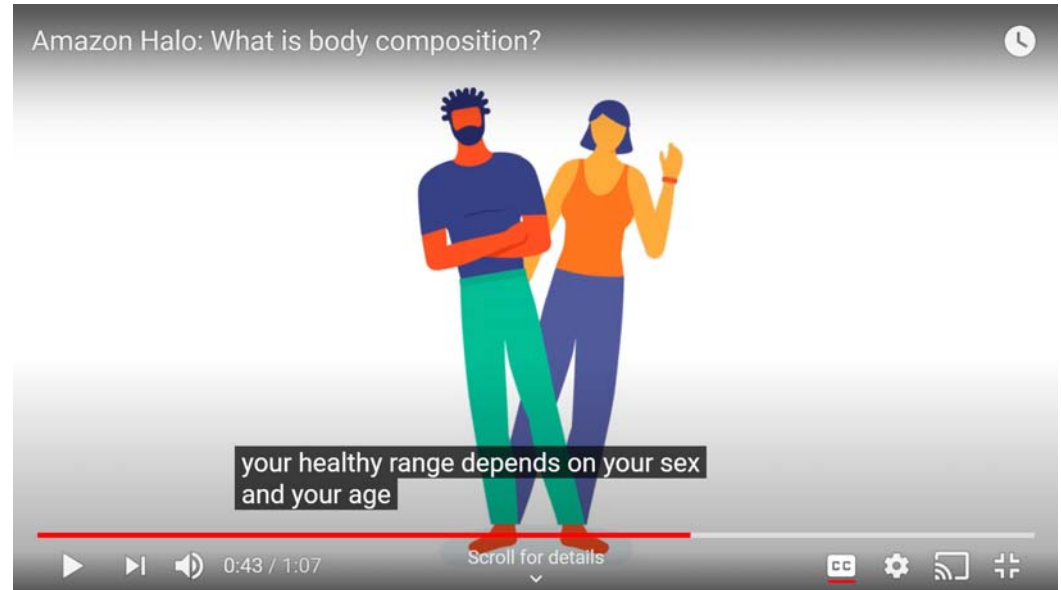
Amazon Halo includes a volume calculator configured to calculate from said three-dimensional model first volume comprising a first body part of said person and a second volume comprising a second body part of said person, as shown in the following screen shot:

[https://www.youtube.com/watch?v=Vq7lK33dauc; downloaded 09/04/2020]

said health calculating device is configured to calculate an indication of the health of said person using the *body composition* of said person by retrieving composition data from said body database and incorporating said composition data into said first volume and said second volume and calculating said indication using a *ratio* of said incorporated first volume to said incorporated second volume.

The Amazon Halo includes a calculating device is configured to calculate an indication of the health of said person using the *body composition* of said person by retrieving composition data from said body database and incorporating said composition data into said first volume and said second volume and calculating said indication using a ratio of said incorporated first volume to said incorporated second volume, as shown in the screen shot below:

[https://www.youtube.com/watch?v=Vq7lK33dauc; downloaded 09/04/2020]

"the information is analyzed by another DNN to understand *the relationship* between images of a person and the physical properties of their body, including body shape and distribution of fat and muscle"

[https://blog.aboutamazon.com/devices/a-better-measure-of-health; download 09/04/2020].

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